Mobile Computer

WI-300

User Manual

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment dose causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

The changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating to conjunction with any other antenna or transmitter.

- Contents -

1. Safety precautions 1
2. Specifications 1
3. List of included items 3
4. Exterior 4
5. Operation 7
   5.1 Main battery and charging 7
   5.2 System reset 8
   5.3 Use and care of the touch panel 8
6. Pin Definition 9

1. Safety precautions

For your safety, please read the following:

(1) Please use only the accessories from the original manufacturer. Use of any accessories not provided by the manufacturer may damage the device and invalidate the product warranty.

(2) Do not place the device in environments that exceed the specified temperature or humidity limits. Doing so may result in damage to the device.

(3) Please keep all I/O ports covered when not in use to prevent water, dirt, metal or other objects from entering the device and causing damage.

(4) Do not disassemble or modify the device, in order to prevent damage to the unit or electrical shock. Any disassembly or modification of the device automatically invalidates the product warranty.

2. Specifications

OS	Windows 7™, Windows Vista™, XP/2000/NT4.0/ME/9x, Linux®
CPU support	Intel® ATOM™ Z5xx Series Processor: Z500P 0.8GHz, 512K Cache, 400MHz FSB; (option) Z510P 1.1GHz, 512K Cache, 400MHz FSB; (Standard) Z520P 1.33GHz, 512K Cache,533MHzFSB; (Option) Z530P 1.6GHz, 512K Cache, 533MHz FSB; (Option) Z540P 1.86GHz, 512K Cache,533MHzFSB; (Option)
CHIPSETS	Intel®US15W System Control Hub Chrontel® CH7317A SDVO to VGA Realtek® ALC262 4-Channel HD Audio

	Codec Anpec® APA2822 Stereo Audio Amplifier Intersil® ISL6261A IMVP-6 Core Regulator Linear Tech® LTC3850 System Power Regulator
MEMORY	1 x 200-pin SO-DDR2 DIMM socket, up to 2GB 400/533MHz SO-DDR2
STORAGE	CF Card Slot, routed as parallel ATA slave SD Card Slot for SD/SD 2.0/MMC Card
EXTERNAL PORTS	2 x USB 2.0 Type-A Connector 2 x RS232C + 1 x USB Combo Connector 2 x RS232C + 1 x USB Cradle Connector VGA D-Sub Connector Earphone Jack Battery Connector DC Input Jack
COMMUNICATION	One Mini-PCIe Card Slot for HSDPA 3.5G module One USIM Card Slot
SYSTEM BIOS (FWH)	8M-bit AWARD Flash BIOS with ACPI, APM support
Power (Adapter)	AC: 50 Watts Switching Power Adapter, UL/CE/PSE Certified Input: 100-240V AC, Output 12V DC, 5.0A
Power (Battery)	DC: 7.4V / 3600mAH Li-ion Rechargeable Battery Pack
Dimensions	267 x 203 x 40 mm
Weight	About 1.55 kg
Operating temperature	Ambient Temperature: 0º C - 40º C (operating),
Storage temperature	Ambient Temperature:10º C - 50º C (Storage)
Relative humidity	0 % ~ 80 % (without condensation)
Ingress protection	IP54
Drop specification	1.2m

3. List of included items

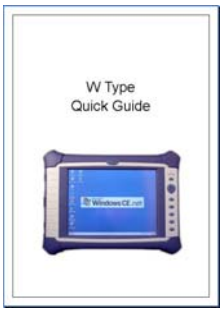
Upon opening the packaging, please check that the following items are included:

(1)

(2)

(3)

(4)



(5)

(1) WI-300 mobile computer

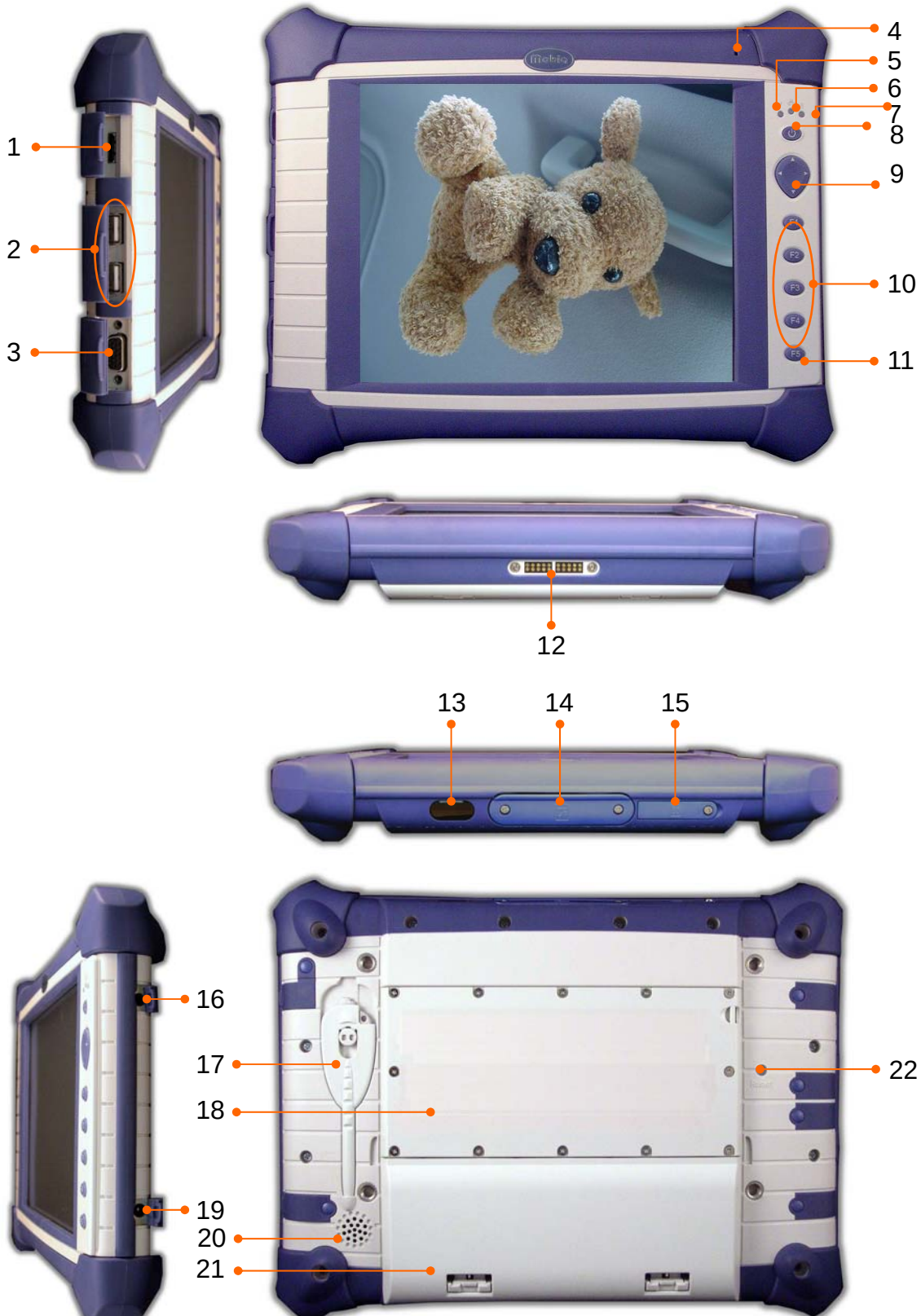
(2) Battery

(3) Charging cable and adaptor

(4) Microsoft ActiveSync installation CD

(5) Quick guide

4. Exterior



1. Multipurpose communications port for:

   (1) USB client – use the USB cable included to link the device to a PC for data synchronization, software installation, etc.

   (2) RS-232 – supports standard RS-232 port functions

2. USB host port: the device features two USB host ports, for use with:

   (1) USB memory drive

   (2) Keyboard

   (3) Mouse

3. VGA port: for standard VGA signal output

4. Built-in microphone

5. Alarm LED: programmable flashing indicator for use with system or application

6. Wireless connection LED: flashes when Bluetooth connection is in use

7. Charging status LED operates as follows:

   (1) Blue: Operating

   (2) Red constant: charging battery. Green: constant: battery fully charged

   (3) Red flash: HDD LED

8. On/Off button

9. Directional arrow keys for moving the cursor

10. Hot keys: four programmable hot keys

11. Keyboard function key: click this key to open/close the onscreen keyboard

12. Cradle connector pins: connection between cradle and device for battery charging and transferring data

13. IrDA data transfer interface

14. CompactFlash slot: supports both CF memory and I/O cards

15. SD slot: supports SD/MMC memory cards

16. Earphone jack: for 3.5mm stereo earphone

17. Stylus

18. Integrated wireless module and backup battery

19. Power adaptor jack

20. Speaker

21. Main battery

22. System reset button

5. Operation

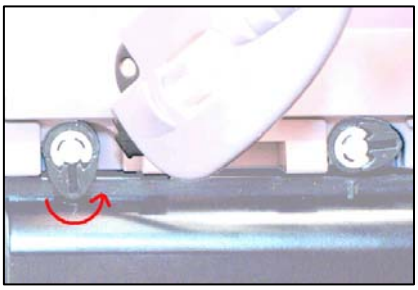
5.1 Main battery and charging

(1) When shipped from the factory, the main battery is minimally charged. To prolong battery life, fully charge the battery before first use.

(2) When battery power is nearly depleted, a popup window will warn user to recharge the main battery. Failure to recharge the battery before power is completely deleted may result in loss of data saved on the device.

(3) Before changing the main battery, turn off the power in order to activate the device's backup battery. Data on the device will be saved, provided the user installs a fully charged battery or connects to an AC power source within 3 minutes. If battery is changed while power is on, data will be lost.

(4) To remove the battery, use the back of stylus to turn the stoppers to unlock and release the battery.



(5) If the device will not be used for extended periods, please remove the battery.

5.2 System reset

If an application causes the device to hang, the system can be reset to operate normally as follows:

Warm reset

Use the stylus to lightly press the reset button on the back of the device. Warm reset will not delete data saved on the device.

5.3 Use and care of the touch panel

(1) Do not place any objects on the panel.

(2) Use only the provided stylus on the touch panel. Do not use your finger or any other pointed objects, to avoid damaging the panel.

(3) Wipe the touch panel with a smooth, clean, anti-static cloth. Mild household cleaner or water can also be used if needed. Do not use alcohol or other industrial strength cleaning fluids.

(4) Do not pour water directly onto the panel. Cleaning should be done only with a damp cloth, in order to avoid damaging the device.

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6. Pin Definition

WI-300 MAIN BOARD CONNECTOR PIN DEFINE

JN1 LVDS

PIN	Pin Define	PIN	Pin Define
1	VDD_3.3	11	RxIN2-
2	VDD_3.3	12	RxIN2+
3	GND	13	GND
4	GND	14	RxCLK-
5	RxIN0-	15	RxCLK+
6	RxIN0+	16	GND
7	GND	17	RxIN3-
8	RxIN1-	18	RxIN3+
9	RxIN1+	19	MODE
10	GND	20	SC

JN2 RTC

PIN	Pin Define	PIN	Pin Define
1	RTCBAT	2	GND

JN3 INVERTER CONNECTOR FOR LED PANEL

PIN	Pin Define	PIN	Pin Define
1	GND	4	VCC3 PWM
2	GND	5	VCC
3	VCC INV_ON1	6	VCC

JN4 1.8” HDD

PIN	Pin Define	PIN	Pin Define
1	NC	21	GND
2	NC	22	DMARQ
3	RESET#	23	GND
4	GND	24	DIOW#
5	D7	25	DIOR#
6	D8	26	GND
7	D6	27	IORDY
8	D9	28	GND

9	D5	29	DMACK#
10	D10	30	INTRQ
11	D4	31	DA1
12	D11	32	PDIAG#
13	D13	33	DA0
14	D12	34	DA2
15	D2	35	CS0#
16	D13	36	CS1#
17	D1	37	DASP#
18	D14	38	3.3V
19	D0	39	3.3V
20	D15	40	DEVADR

JN5 WiFi+BT

PIN	Pin Define	PIN	Pin Define
1	VCC 5V	5	WF_LED
2	USB_DATA-	6	BT_LED
3	USB_DATA+	7	NC
4	GND	8	NC

JN6 Camera CON

PIN	Pin Define	PIN	Pin Define
1	VCC 5V	4	GND
2	USB_DATA-	5	GND
3	USB_DATA+		

JN8 MIC CON

PIN	Pin Define	PIN	Pin Define
1	MIC	2	AGND

JN9 AUDIO CON

PIN	Pin Define	PIN	Pin Define
1	AUDIO OUT	2	AGND

JN12 CRADLE CON

PIN	Pin Define	PIN	Pin Define
1	TXD1 (COM3)	13	NC

2	RXD1(COM3)	14	GND
3	RTS1(COM3)	15	GND
4	CTS1(COM3)	16	GND
5	TXD2(COM4)	17	USB_5V
6	RXD2(COM4)	18	NC
7	RTS2(COM4)	19	NC
8	CTS2(COM4)	20	NC
9	NC	21	USB_GND
10	+12V IN	22	USB_DATA-
11	+12V IN	23	USB_DATA+
12	+12V IN	24	USB_GND

JN13 CPLD JTAG

PIN	Pin Define	PIN	Pin Define
1	3.3V	4	TMS
2	TDO	5	TCK
3	TDI	6	GND

JN14 KEY CTRL CON

PIN	Pin Define	PIN	Pin Define
1	KEY_COL0	13	KEY_COL6
2	PWBN_H	14	KEY_COL12
3	KEY_COL1	15	KEY_COL7
4	IDEACT_H	16	IDEACT#
5	KEY_COL2	17	KEY_COL8
6	WLANLED_H	18	-WLAN_LED
7	KEY_COL3	19	PWR_BTN
8	KEY_COL9	20	BAT_POWER
9	KEY_COL4	21	CHARGE_LED
10	KEY_COL10	22	BAT_POWER
11	KEY_COL5	23	ACP_LED
12	KEY_COL11	24	KEY_ROW0

JN16 TOUCH SCREEN

PIN	Pin Define	PIN	Pin Define
1	X+	3	X-
2	Y+	4	Y-

JN17 GPS CON

PIN	Pin Define	PIN	Pin Define
1	VCC 3.3V	5	RTSA(COM1)
2	TXDA(COM1)	6	CTSA(COM1)
3	RXDA(COM1)	7	P1PPS
4	GND	8	NC

JN18 RFID CON (COM2)

PIN	Pin Define	PIN	Pin Define
1	VCC 3.3V	5	RTSB(COM2)
2	TXDB(COM2)	6	CTSB(COM2)
3	RXDB(COM2)	7	NC
4	GND	8	-TRIG

CN1 CF SLOT

PIN	Pin Define	PIN	Pin Define
1	GND	26	CD1#
2	D03	27	D11
3	D04	28	D12
4	D05	29	D13
5	D06	30	D14
6	D07	31	D15
7	CS0#	32	CS1#
8	A10	33	VS1#
9	ATASEL#	34	IORD#
10	A09	35	IOWR#
11	A08	36	WE#
12	A07	37	INTRQ
13	VCC 5V	38	VCC 5V
14	A06	39	CSEL#
15	A05	40	VS2#
16	A04	41	RESET#
17	A03	42	IORDY
18	A02	43	INPACK#
19	A01	44	REG#
20	A00	45	DASP#

21	D00	46	PDIAG#
22	D01	47	D08
23	D02	48	D09
24	IOCS16#	49	D10
25	CD2#	50	GND

CN2 USB

PIN	Pin Define	PIN	Pin Define
1	VCC 5V	3	DATA+
2	DATA1-	4	GND

CN3 USB

PIN	Pin Define	PIN	Pin Define
1	VCC 5V	3	DATA+
2	DATA1-	4	GND

CN5 VGA

PIN	Pin Define	PIN	Pin Define
1	CRT_R	9	NC
2	CRT_G	10	GND
3	CRT_B	11	NC
4	NC	12	CRT_DDCDAT 5V
5	GND	13	CRT_HS
6	GND	14	CRT_VS
7	GND	15	CRT_DDCCLK 5V
8	GND		

CN7 STEREO JACK

PIN	Pin Define	PIN	Pin Define
1	AGND	10	LS
2	HP-L	11	RS
3	HP-R		

CN8 SIM CON

PIN	Pin Define	PIN	Pin Define
1	VCC	4	GND
2	RST	5	VPP
3	CLK	6	I/O

CN9 SD/MMC

PIN	Pin Define	PIN	Pin Define
1	DAT3	8	DAT1
2	CMD	9	DAT2
3	VSS(GND)	10	CD
4	VDD(3.3V)	11	CW_GND
5	SCLK	12	WP
6	VSS(GND)	13	GND
7	DAT0	14	GND

CN10 SIDE I/O

PIN	Pin Define	PIN	Pin Define
1	TXD3 (COM5)	10	GND
2	RXD3(COM5)	11	GND
3	RTS3(COM5)	12	USB_DATA+
4	CTS3(COM5)	13	USB_DATA-
5	TXD4(COM6)	14	CLIENT_VIN
6	RXD4(COM6)	15	USB_5V
7	RTS4(COM6)	16	USB_DATA-
8	CTS4(COM6)	17	USB_DATA+
9	GND	18	USB_GND

CN11 12V DC-IN

PIN	Pin Define	PIN	Pin Define
1	DC-IN +12V	3	GND
2	GND	4	GND

CN12 BATTERY CONN

PIN	Pin Define	PIN	Pin Define
1	BT+	4	BATTHM
2	SMBCLK	5	BT-GND
3	SMBDATA		

CN4 DDRII CONNECTOR

CN6 MINI –PCIE

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